RESTRICTED CIRCULATION

This paper is not an official document; it is for information only and reference cannot be made to it in any printed publication without the permission of the author.

AGRICULTURAL MEMORANDUM NO 453

RETURN TO CAPACITY, WHEAT & FALLOW ACREAGE - SOUTHEAST

L P SMITH

Mean return dates were found by taking sample stations for each part of the region (as per Tec Bull 24) and

Weighting w.r.t. total cereal acreage - Rc (where S1 = 1)
Weighting w.r.t. wheat acreage - Rw

and these were compared to the fallow acreage (F) and the wheat acreage (W) respectively (in units of 1000 acres).

Results

Year	Rc	F	Rw	W	Estimated W
1959	2.9	78.4	3.1	252.9	230
1961	3.0	70.0	3.1	231.4	253
1967	5.1	54.2	5.2	347.3	336
1968	6.0	45.7	6.2	345.2	353
1966	6.8	56.6	6.8	351.7	334
1964	7.1	47.6	7.3	284.8	313
1962	8.4	38.1	8.5	301.4	297
1963	9.4	51.3	9.5	249.1	-
1960	9.6	43.1	9.6	275.8	280
1965	12.7	38.2	12.7	362.0	357
				Mean error	13.9 (4%)

The correlation between log Rc and log F is - 0.89

The formula used to estimate the wheat acreage is

$$211.5 + 5.9\,Rw + 11.7n$$

where n is number of years after 1959

1963 was omitted owing to heavy winter snow. As spring conditions have been ignored and the total of spring sown wheat is unknown, the fit is not unsatisfactory.

The values of Rw in 1969 and 1970 were 2.2 and 10.7 giving estimates:-

	Wheat acreage
June 1969	341,480
June 1970	403,330

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell
June 1972

/LBN/6/72/60

RESTRICTED CIRCULATION